## AMENDMENTS TO THE CLAIMS

*Please cancel claims 24-28 without prejudice.*

*Please amend the claims as follows:*

1. (Currently amended) A method comprising:

receiving content for transmission [[from]] over a multicarrier communication channel having *Nc* subcarriers, the transmission to be made via a plurality of three or more transmit antennae, the number of transmit antenna being M and the received content being vectors of input symbols of size *Nc*×1; [[and]]

generating a rate-one, space-frequency code matrix from the received content for the transmission via the plurality of ~~three or more~~ transmit antennae to a plurality of receive antennae, ~~wherein the plurality of three or more transmit antennae provide full space-frequency diversity of M*N*L, where M is a number of transmit antenna, N is a number of receiver antenna, L is a number of matrix channel taps.~~ wherein generating the rate-one space frequency code matrix comprises:

dividing a vector of input symbols into *G* groups of vectors,

multiplying each of the G groups by a constellation rotation pre-coder to produce a number *G* of pre-coded vectors,

dividing each of the pre-coded vectors into groups of subvectors, and utilizing the subvectors to generate a diagonal matrix, and

interleaving the submatrices from the G groups to generate a rate-one space-frequency matrix of size M×Nc; and

transmitting the rate-one space-frequency matrix via the plurality of transmit antennae.

2-28. (Cancelled)

*Please add the following new claims:*

29. (New) The method of claim 1, wherein the transmission provides full space-frequency diversity of M×N×L, where N is a number of receiver antennae.

30. (New) The method of claim 1, wherein dividing the vector of input symbols into G groups comprises:

dividing the vector of input symbols into *G* groups of (ML)×1 vectors, wherein L is a number of matrix channel taps and wherein *Nc* = M×L×G,

31. (New) The method of claim 1, wherein the input symbols are QAM (quadrature amplitude modulation) symbols.

32. (New) The method of claim 1, wherein the same constellation-rotation pre-coder is applied to each of the Nc×1 vector of input symbols by left-multiplying the vector by the constellation rotation, and wherein the constellation rotation is of dimension ML×ML to produce a size ML vector.

33. (New) The method of claim 1, wherein dividing each of the pre-coded vectors into groups of subvectors comprises:

dividing each of the pre-coded vectors into L groups of M×1 subvectors, and utilizing the subvectors to generate an M×M diagonal matrix.

34. (New) The method of claim 1, wherein interleaving the submatrices from the G groups to generate a rate-one space-frequency matrix comprises generating a code word

comprising a matrix of size M×Nc such that successive symbols in the same group are equi-spaced in the codeword.

35. (New) The method of claim 1, further comprising encoding the content using a modulation technique.

36. (New) The method of claim 1,wherein for the rate-one, space-frequency code matrix sucessive symbols from the same group that are transmitted from the same antenna of the plurality of antennae are at a frequency distance that is multiples of MG subcarrier spacings.

37. (New) The method of claim 36,wherein the L symbols from the same group transmitted from the same antenna exerience uncorrelated fading.